

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

REVISED VERSION

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
6 September 2002 (06.09.2002)

PCT

(10) International Publication Number  
**WO 02/068637 A2**

(51) International Patent Classification<sup>7</sup>: **C12N 15/11**,  
9/00, A61K 31/713, C07H 21/00, A61P 31/14

(21) International Application Number: PCT/US01/48350

(22) International Filing Date: 19 October 2001 (19.10.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/242,411 20 October 2000 (20.10.2000) US

(71) Applicant (*for all designated States except US*): **RI-BOZYME PHARMACEUTICALS, INC.** [US/US];  
2950 Wilderness Place, Boulder, CO 80301 (US).

(71) Applicants and

(72) Inventors: **BLATT, Lawrence** [US/US]; 2176 Riverside Lane, Boulder, CO 80304 (US). **MCSWIGGEN, James, A.** [US/US]; 4866 Franklin Drive, Boulder, CO 80301 (US).

(74) Agent: **TERPSTRA, Anita, J.**; McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 South Wacker Drive, Chicago, IL 60606 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CII, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— *with declaration under Article 17(2)(a); without abstract; title not checked by the International Searching Authority*

(48) Date of publication of this revised version: 15 May 2003

**(15) Information about Correction:**

see PCT Gazette No. 20/2003 of 15 May 2003, Section II

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: NUCLEIC ACID-BASED TREATMENT OF DISEASES OR CONDITIONS RELATED TO WEST NILE VIRUS INFECTION

(57) Abstract:



WO 02/068637 A2

# PATENT COOPERATION TREATY

# PCT

## DECLARATION OF NON-ESTABLISHMENT OF INTERNATIONAL SEARCH REPORT

(PCT Article 17(2)(a), Rules 13ter.1(c) and Rule 39)


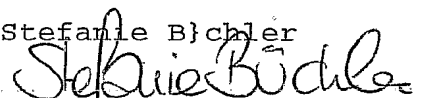
Applicant's or agent's file reference <b>MBHB00,1109-B</b>	IMPORTANT DECLARATION	Date of mailing(day/month/year) <b>20/12/2002</b>
International application No. <b>PCT/US 01/ 48350</b>	International filing date(day/month/year) <b>19/10/2001</b>	(Earliest) Priority date(day/month/year) <b>20/10/2000</b>
International Patent Classification (IPC) or both national classification and IPC		<b>C12N15/11, C12N9/00, A61K31/713, C07H21/00, A61P31/14</b>
Applicant <b>RIBOZYME PHARMACEUTICALS, INC.</b>		

This International Searching Authority hereby declares, according to Article 17(2)(a), that **no international search report will be established** on the international application for the reasons indicated below

1. ☐ The subject matter of the international application relates to:
  - a. ☐ scientific theories.
  - b. ☐ mathematical theories
  - c. ☐ plant varieties.
  - d. ☐ animal varieties.
  - e. ☐ essentially biological processes for the production of plants and animals, other than microbiological processes and the products of such processes.
  - f. ☐ schemes, rules or methods of doing business.
  - g. ☐ schemes, rules or methods of performing purely mental acts.
  - h. ☐ schemes, rules or methods of playing games.
  - i. ☐ methods for treatment of the human body by surgery or therapy.
  - j. ☐ methods for treatment of the animal body by surgery or therapy.
  - k. ☐ diagnostic methods practised on the human or animal body.
  - l. ☐ mere presentations of information.
  - m. ☐ computer programs for which this International Searching Authority is not equipped to search prior art.
2. ☒ The failure of the following parts of the international application to comply with prescribed requirements prevents a meaningful search from being carried out:
 

☐ the description
 ☒ the claims
 ☐ the drawings
3. ☐ The failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions prevents a meaningful search from being carried out:
 

☐ the written form has not been furnished or does not comply with the standard.
 ☐ the computer readable form has not been furnished or does not comply with the standard.
4. Further comments: see additional sheet

Name and mailing address of the International Searching Authority  European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Stefanie B{chler 
--	---

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 203

The concept of inhibiting or treating viral infections (including flaviviridae) by using antisense RNA or ribozymes which comprise complementary sequences to the virus genome is well known. The gist of all possible nucleic acid molecules to be used is their sequence which has to be suitable for said purpose. In none of claims 1 to 22 a reference to any sequence is made. Therefore, these claims define the essential feature at best by an obvious desideratum which definition renders them unsearchable. On the other hand, the first claims which comprise references to sequences are Claims 23 and 24. In these claims, however, reference is made to 37043 different SEQ ID NOs is made. Although formulated as dependent claims, nevertheless these claims must be considered as constituting independently claimed alternatives. The claiming of such a huge number of alternatives renders the claims inconcise and, thus, makes a search equally impossible. Moreover, these claims are objectionable for lack of unity since the claimed sequences lack a common structural feature. Since no specific example(s) exists which indicates one (or more) of the specific sequences as a preferred one(s), no explicit objection has been raised for lack of unity and no search has been carried out.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.